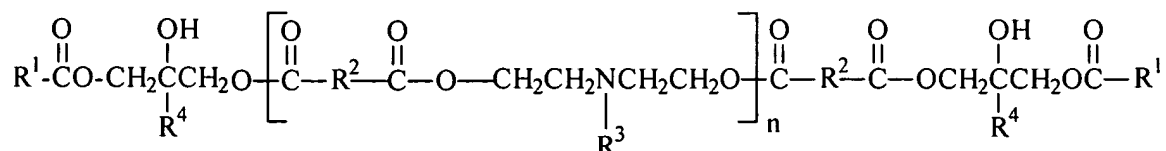


WHAT IS CLAIMED IS:

1. A polyesteramine represented by the formula:



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wherein each  $R^1$  is independently selected from the group consisting of: a linear, branched or cyclic hydrocarbyl group; each  $R^2$  is independently the same or different hydrocarbylene group; each  $R^3$  is independently selected from the group consisting of: hydrogen and a hydrocarbyl group; each  $R^4$  is independently selected from the group consisting of: hydrogen, methyl and ethyl; and n is an integer from 1 to about 60.

- 15            2.    The polyesteramine of claim 1, wherein R<sup>1</sup> is a  
hydrocarbyl group of 3 to 23 carbon atoms.

3. The polyesteramine of claim 1, wherein R<sup>1</sup> is a hydrocarbyl group of 16 to 22 carbon atoms.

4. The polyesteramine of claim 1, wherein  $R^1$  is a hydrocarbyl group of 17 carbon atoms, which is the hydrocarbyl group of isooctadecanoic acid.

5 5. The polyesteramine of claim 1, wherein  $R^1$  is a hydrocarbyl group of 17 carbon atoms, which is the hydrocarbyl group of isostearic acid.

6. The polyesteramine of claim 1, wherein  $R^1$  is a  
10 hydrocarbyl group of 21 carbon atoms, which is the hydrocarbyl group of behenic acid.

7. The polyesteramine of claim 1, wherein  $R^2$  is a hydrocarbylene group of 1 to 10 carbon atoms.

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8. The polyesteramine of claim 7, wherein  $R^2$  is a hydrocarbylene group of 2 to 6 carbon atoms.

9. The polyesteramine of claim 1, wherein  $R^2$  is the  
20 alkylene group of adipic acid.

10. The polyesteramine of claim 1, wherein  $R^3$  is a hydrocarbyl group of 1 to 6 carbon atoms.

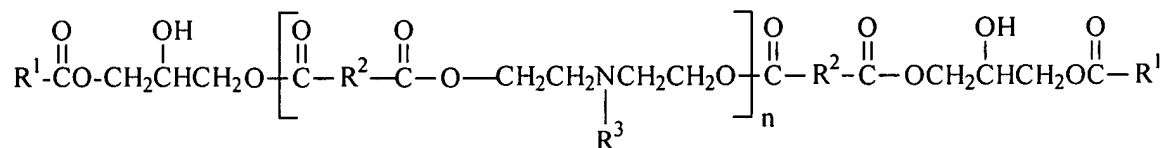
11. The polyesteramine of claim 10, wherein  $R^3$  is a hydrocarbyl group of 1 to 3 carbon atoms.

12. The polyesteramine of claim 11, wherein  $R^3$  is a methyl.

13. The polyesteramine of claim 1, wherein n is an integer from 1 to 25.

14. The polyesteramine of claim 13, wherein n is an integer from 1 to 10.

15. The polyesteramine of claim 1, wherein said polyesteramine is represented by the formula:



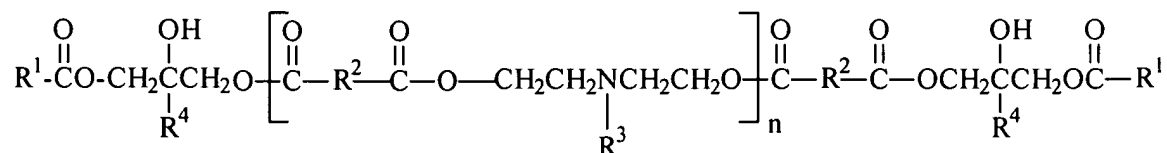
wherein  $R^1$  is a linear, branched or cyclic hydrocarbyl group;  $R^2$  is a hydrocarbylene group;  $R^3$  is selected from the group consisting of: hydrogen and a hydrocarbyl group; and n is an integer from 1 to about 60.

16. The polyesteramine of claim 15, wherein R<sup>1</sup> is a hydrocarbyl group of 3 to 23 carbon atoms.

5 17. The polyesteramine of claim 15, wherein R<sup>1</sup> is a hydrocarbyl group of 16 to 22 carbon atoms.

18. A composition for topical application to hair, skin or nails, comprising:

10 a polyesteramine compound represented by the formula:



wherein each R<sup>1</sup> is independently selected from the group

15 consisting of: a linear, branched or cyclic hydrocarbyl group;

each R<sup>2</sup> is independently the same or different hydrocarbylene group; each R<sup>3</sup> is independently selected from the group

consisting of: hydrogen and a hydrocarbyl group; each R<sup>4</sup> is

independently selected from the group consisting of: hydrogen,

20 methyl and ethyl; and n is an integer from 1 to about 60.

19. The polyesteramine of claim 18, wherein R<sup>1</sup> is a hydrocarbyl group of 3 to 23 carbon atoms.

5        20. The polyesteramine of claim 18, wherein R<sup>1</sup> is a hydrocarbyl group of 16 to 22 carbon atoms.

21. The composition of claim 18, wherein R<sup>1</sup> is a hydrocarbyl group of 17 carbon atoms, which is the hydrocarbyl  
10 group of isooctadecanoic acid.

22. The composition of claim 18, wherein R<sup>1</sup> is a hydrocarbyl group of 17 carbon atoms, which is the hydrocarbyl group of isostearic acid.

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23. The composition of claim 18, wherein R<sup>1</sup> is a hydrocarbyl group of 21 carbon atoms, which is the hydrocarbyl group of behenic acid.

20        24. The composition of claim 18, wherein R<sup>2</sup> is a hydrocarbylene group of 1 to 10 carbon atoms.

25. The composition of claim 18, wherein R<sup>2</sup> is a hydrocarbylene group of 2 to 6 carbon atoms.

26. The composition of claim 18, wherein  $R^2$  is the alkylene group of adipic acid.

5        27. The composition of claim 18, wherein  $R^3$  is a hydrocarbyl group of 1 to 6 carbon atoms.

28. The composition of claim 27, wherein  $R^3$  is a hydrocarbyl group of 1 to 3 carbon atoms.

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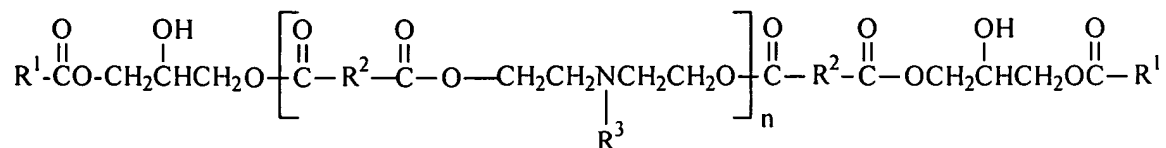
29. The composition of claim 28, wherein  $R^3$  is a methyl.

30. The composition of claim 18, wherein  $n$  is an integer from 1 to 25.

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31. The composition of claim 30, wherein  $n$  is an integer from 1 to 10.

32. The composition of claim 18, wherein said  
20 polyesteramine is represented by the formula:



wherein  $R^1$  is a linear, branched or cyclic hydrocarbyl group of 16 to 22 carbon atoms;  $R^2$  is a hydrocarbylene group;  $R^3$  is selected from the group consisting of: hydrogen and a

5 hydrocarbyl group; and  $n$  is an integer from 1 to about 60.

33. The polyesteramine of claim 32, wherein  $R^1$  is a hydrocarbyl group of 3 to 23 carbon atoms.

10 34. The polyesteramine of claim 32, wherein  $R^1$  is a hydrocarbyl group of 16 to 22 carbon atoms.

35. The composition of claim 18, wherein said polyesteramine is present in said composition in an amount

15 effective to provide at least one benefit selected from the group consisting of: hair detangling, improved wet and dry combing, shine, gloss, conditioning, surface smoothening, water resistance, film-forming properties, static charge reduction, thickening and surfactant activity.

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36. The composition of claim 18, wherein said composition is in a form selected from the group consisting of: shampoo,

hair conditioner, styling mousse, hair treatment preparation, hair coloring product, semi-perm product, oxidation dye, body wash, liquid soap, skin care preparation, lipstick, mascara, color cosmetic, nail care preparation, cream, foam, gel, lotion, solution, pomade, mousse, stick, pump spray, aerosol spray and any combination thereof.

37. The composition of claim 18, wherein said polyesteramine is present in an amount from about 0.01 wt% to about 40 wt% based on the total weight of the composition.

38. The composition of claim 37, wherein said polyesteramine is present in an amount from about 0.05 wt% to about 20 wt% based on the total weight of the composition.

39. The composition of claim 38, wherein said polyesteramine is present in an amount from about 0.1 wt% to about 10 wt% based on the total weight of the composition.

40. The composition of claim 18, further comprising one or more additional components selected from the group consisting of: antimicrobials, antioxidants, buffering agents, chelating agents, colorants, conditioning agents, emollients, emulsifiers, film formers, fragrances, humectants, lubricants, moisturizers,



pigments, preservatives, skin penetration enhancers, stabilizers, surfactants, thickeners, viscosity modifiers, vitamins and any combination thereof.

5           41. The composition of claim 18, wherein the composition is a hair conditioner and wherein said polyesteramine is present in an amount from about 0.01 wt% to about 10 wt% based on the total weight of the composition.

10           42. The composition of claim 18, wherein the polyesteramine is present in an amount from about 0.1 wt% to about 5 wt% based on the total weight of the composition.

15           43. The composition of claim 18, wherein the composition is a hair styling product and wherein said polyesteramine is present in an amount from about 0.1 wt% to about 10 wt% based on the total weight of the composition.

20           44. The composition of claim 18, wherein the composition is a styling gel and wherein said polyesteramine is present in an amount from about 0.1 wt% to about 4.0 wt% based on the total weight of the composition.

45. The composition of claim 18, wherein the composition is a body wash wherein said polyesteramine is present in an amount from about 0.1 wt% to about 4 wt% based on the total weight of the composition.

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46. A method of imparting to hair, skin or nails an attribute selected from the group consisting of: hair detangling, improved wet and dry combing, shine, gloss, conditioning, surface smoothening, water resistance, film-forming properties, static charge reduction and any combination thereof, said method comprising:

applying onto said hair, skin or nails an effective amount of the composition of claim 18.

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47. The method of claim 46, wherein said composition is in a form selected from the group consisting of: shampoo, hair conditioner, styling mousse, hair treatment preparation, hair coloring product, semi-perm product, oxidation dye, body wash, liquid soap, skin care preparation, lipstick, mascara, color cosmetic, nail care preparation, cream, foam, gel, lotion, solution, pomade, mousse, stick, pump spray, aerosol spray and any combination thereof.

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48. The method of claim 46, wherein said polyesteramine is present in an amount from about 0.1 wt% to about 10 wt% based on the total weight of the composition.

5        49. A method of enhancing the appearance of hair comprising:

applying onto said hair an effective amount of the composition of claim 18.

10       50. A method of styling hair to produce improved styling hold and/or improved curl retention, said method comprising:

applying onto said hair an effective amount of the composition of claim 18.

15       51. A method of conditioning hair comprising:

applying onto said hair an effective amount of the composition of claim 18.

20       52. The method of claim 51, wherein said hair has improved smoothness.

53. A method of cleansing skin comprising:

applying to said skin an effective amount of the composition of claim 18.